

REMARKS

Claims 1 – 3 and 6 – 18 are now pending in the application. Claims 1 – 3 and 6 – 18 stand rejected. Independent claims 1 and 10 have been amended. Dependent claims 2, 3, 6 – 8, 11 – 13, 15 and 16 have been amended to correct minor informalities and maintain antecedent basis with the currently amended independent claims. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

Allowable Subject Matter

The Examiner has indicated that claims 1 – 3 and 6 – 18 appear to be allowable over the prior art of record if amended to be clearly consistent with the disclosure of the application as filed. As a result, Applicants have amended the claims according to the Examiner's comments.

REJECTION UNDER 35 U.S.C. § 112

Claims 1 – 3 and 6 – 18 stand rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. This rejection is respectfully traversed.

The Examiner has stated "The exemplary embodiment of Figures 3 and 4 is described as opening the inlet valve of one cylinder and exhaust valve of another cylinder for two cycles. The inlet and exhaust valves of two of the four cylinders do not appear to be opened as claimed".

Applicants note that claims 1 and 10 have been amended to more clearly recite the invention consistent with the specification and drawings. More specifically, claim 1 has been amended to recite "opening an inlet valve of the first cylinder undergoing the power stroke; and opening an exhaust valve of a second cylinder undergoing a compression stroke". Applicants turn the Examiners' attention to FIGS. 3 and 4 of the application. As shown, for a first cycle (84), a first column (76) corresponds to a cylinder (50). For the cylinder (50), an inlet valve (58) is identified as "O" (open) while undergoing a "P" (power) stroke. Likewise, for the first cycle (84), another column (80) corresponds to a cylinder (54). For the cylinder (54), an exhaust valve (68) is identified as "O" (open) while undergoing a "C" (compression) stroke.

Claim 10 has been amended to recite the operation of four cylinders during starting of an engine. More specifically, claim 10 recites, "opening an inlet valve of the first and a second cylinder undergoing the power stroke and an intake stroke, respectively; and opening an exhaust valve of a third and a fourth cylinder undergoing a compression and an exhaust stroke, respectively."

Further to the discussion above with respect to cylinders 50 and 54, claim 10 includes the actions associated with cylinders 52 and 56. Turning to FIGS. 3 and 4, for the first cycle (84), another column (78) corresponds to a cylinder (52). For the cylinder (52), an exhaust valve (64) is identified as "O" (open) while undergoing an "E" (exhaust) stroke. Likewise, for the first cycle (84), another column (82) corresponds to a cylinder (56). For the cylinder (56), an inlet valve (70) is identified as "O" (open) while undergoing an "I" (intake) stroke.

In view of the preceding discussion with regard to FIGS. 3 and 4, claim 17 as previously presented defines patentable subject matter. Specifically, claim 17 provides "an engine management system that opens at least one inlet valve of each cylinder ... performing a power stroke and opens at least one exhaust valve of each cylinder ... undergoing a compression stroke".

Applicants respectfully assert that the prior art of record does not teach or suggest opening the respective valves as discussed above. Therefore, Applicants respectfully assert that claims 1 – 3 and 6 – 18 are now in condition for allowance.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (313) 665-4969.

Respectfully submitted,

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